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A NEW CATFISH, CORYDORAS PASTAZENSIS (CALLICHTHYIDAE) FROM ECUADOR

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New species of the catfish genus *Corydoras* continue to make their appearance almost every year. Undescribed specimens from eastern Ecuador were sent to me for identification by Leonard P. Schultz of the U. S. National Museum. They belong to the long-snouted group of *Corydoras* (see Weitzman, 1961: 109) and appear most closely related to *Corydoras treitlii* Steindachner (1906). However, they differ in color pattern and certain proportions from this and any other known species.

I am indebted to Dr. Schultz for the loan of the specimens of this species; to Prof. George S. Myers of Stanford University, W. I. Follett of the California Academy of Sciences, and Dr. Paul Kähsbauer of the Naturhistorisches Museum, Vienna, for the loan of specimens for comparative examination.

Corydoras pastazensis, new species (Fig. 1)

Holotype: U. S. National Museum 177216, 49.1 mm in standard length, collected during January 1954 by Ramon Olalla at Chicherata near the mouth of the Río Bobonaza, a tributary of the Río Pastaza, itself a tributary of the Río Maranon, Pastaza Province, Ecuador, about 2° 33' S latitude and 76° 40' W longitude.

Paratypes: USNM 164464, three specimens collected 19 January 1954 by Ramon Olalla near the mouth of Río Bobonaza, Napo-Pastaza settlement, Ecuador.

Diagnosis: Corydoras pastazensis may be distinguished from all known species of Corydoras by the following combination of characters. Least interorbital width 37 to almost 42% of snout length, least depth of the caudal peduncle 14.4 to 15% of the standard length, predorsal length about 78 to 80% of the postdorsal length, least caudal peduncle depth about 65 to 69% of the snout length, and caudal fin barred.

Description: All proportions and percentages are based on standard

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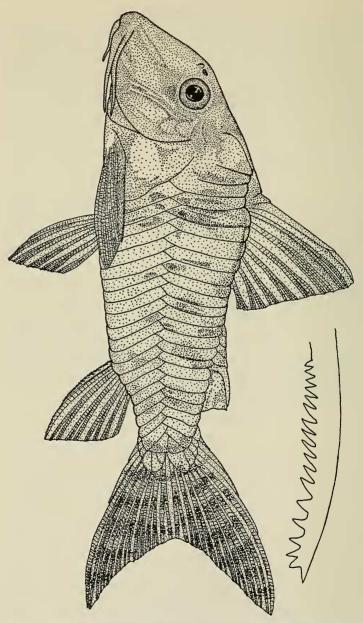


FIG. 1. Corydoras pastazensis, holotype USNM 177216. Standard length 49.1 mm. INSET: Ventral view of left pectoral fin spine.

A New Catfish from Ecuador

MEASUREMENTS	HOLOTYPE, USNM 177216	paratypes, usnm 164464		
		A	В	С
Standard length	49.1	49.6	50.6	60.7
Head length		16.3	16.3	20.0
Snout length		10.9	11.2	13.7
Least width of bony interorbital .	4.6	4.2	4.6	5.1
Greatest diameter of bony orbit .	4.5	4.3	4.6	5.1
Greatest width of suborbital		0.9	1.0	1.7
Length of fontanel		6.2	5.9	6.5
Length of predorsal scale	. 3.3	3.3	3.4	4.1
Greatest width of head		10.4	11.5	14.6
Snout tip to dorsal fin origin		24.3	25.0	31.0
Snout tip to adipose fin origin	40.9	41.3	42.4	51.7
Snout tip to anal fin origin	. 39.3	38.9	41.1	48.2
Snout tip to anterior edge of anu	s 26.1	27.2	27.0	31.5
Greatest body depth		18.2	18.6	22.5
Least depth of caudal peduncle .	- 7.3	7.5	7.3	9.0
Distance between coracoids		5.3	5.1	6.3
Length of dorsal spine		11.9	12.6	14.4
Length of pectoral spine	. 10.9	12.0	11.8	13.3
Length of adipose spine	4.7	4.9	4.6	4.9
Postdorsal fin length		31.1	31.4	39.0
Post head length		34.6	35.3	43.7
Caudal peduncle length	7.2	7.2	6.7	9.3

TABLE 1.—Measurements in millimeters of specimens of Corydoras pastazensis

length. Data for the holotype are given first, followed by data for paratypes in brackets. Specimens are listed as follows: Specimen A has a standard length of 49.6, specimen B 50.6, and specimen C 60.7 mm. Standard length of the holotype is 49.1 mm. Body fairly deep, greatest depth 2.7(36.4%) [A, 2.7(36.8%); B, 2.7(36.8%); C, 2.7(37.1%)]. Least depth of caudal peduncle 6.7 (14.9%) [A, 6.6(15.1%); B, 6.9 (14.4%); C, 6.7(14.8%)]. Dorsal fin origin nearer to snout tip than to caudal fin base (see Fig. 1). Distance between snout tip and dorsal fin origin 2.0(50.1%) [A, 2.0(49.0%); B, 2.0(49.5%); C, 2.0(51.1%)]. Distance between snout tip and anus 1.9(53.2%) [A, 1.8(54.8%); B, 1.9 (53.4%); C, 1.9 (51.9%)]. Anal fin origin to snout tip 1.3(80.0%) [A. 1.3(78.4%); B, 1.2(81.2%); C, 1.3(79.3%)]. Lateral scutes 24/21 in all specimens. Abdomen and thorax covered with fine posteriorly pointing, bony prickles in all specimens. Bony plates on abdomen and thorax absent. Azygous mid-dorsal scutes 4 [A, 6; B, 5; C, 4] before adipose fin and one before dorsal fin in all specimens. Pectoral fin base incompletely sur-

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rounded by coracoid. Area between coracoids 9.8(10.2%) [A, 9.4 (10.7%); B, 9.9(10.1%); C, 9.6(10.4%)]. Head length 2.9(34.0%) [A, 3.0(32.9%); B, 3.1(32.2%); C, 3.0(33.0%)]; its greatest width 1.7 (58.1%) [A, 1.6(63.8%); B, 1.4(70.6%); C, 1.4(73.0%)] in its length. Least width of bony interorbital 3.6 (27.6%) [A, 3.9(25.8%); B, 3.5(27.2%); C, 3.9(25.5%)] in head length. Snout acute in dorsal view, snout tip well rounded; its length 1.5(65.9%) [A, 1.5(66.9%); B, 1.5(68.8%); C, 1.5(68.5%)] in head length. Dorsal profile of snout concave in all specimens. When directed posteriorly rictal barbels reach a point directly on a vertical with the posterior margin of the eye. Greatest diameter of orbit 3.7(27.0%) [A, 3.8(26.4%); B, 3.5(27.2%); C, 3.9(25.5%)] in head length. Greatest width of suborbital 5.6(17.8%) [A, 4.8(21.0%); B, 4.6(21.8%); C, 3.0(33.3%)] in orbit.

Dorsal fin I, 7 in all specimens, last fin ray split to its base. Neither depressed spine nor first soft ray of dorsal fin reaches adipose fin spine. Adipose fin spine 1.0(104.4%) [A, 0.9(114.0%); B, 1.0(100.0%); C, 1.0(96.0%)] in orbit. Anal fin I, 5 in all specimens, last fin ray split to its base. Pectoral fin I, 10 in all but specimen C which had I, 11. Pelvic fin rays i, 5 in all specimens. Caudal fin with principal rays 7/7 in all specimens. Pectoral fin spine (Fig. 1) has 17 [A, 16; B, 18; C, 20] prominent, mostly recurved spinules along its posterior border.

Color: The holotype has the following color in alcohol. The overall body color is a pale yellowish brown. The anterior part of the head (that portion exclusive of the opercula) is a grayish brown. In life the belly may have been white as it is in many species of *Corydoras;* however, in the preserved specimens it is a pale brown. A rather indistinct brown vertical bar occurs below the dorsal fin in all specimens. Posterior to this band the body is irregularly spotted with moderate sized blotches. The caudal fin has a series of 7 to 9 narrow vertical dark bars (7 in the holotype) in the upper lobe, usually one or two less in the lower lobe. Color in life is unknown.

Discussion: Corydoras pastazensis appears definitely related to longsnouted Corydoras such as Corydoras acutus (Cope, 1872), treitlii Steindashner (1906), spilurus Norman (1926), septentrionalis Gosline (1940), ellisae Gosline (1940), fowleri Böhlke (1950), and concolor Weitzman (1961). Corydoras pastazensis is very similar to treitlii in body shape and proportions, interorbital width and snout length. On the basis of least interorbital width in snout length, pastazensis keys to treitlii in Gosline's key (1940: 13). Of the species described subsequent to Gosline (1940), only fowleri has the least interorbital width less than 50% of the snout length. The least interorbital width is 37.2 to 41.8% of the snout length in pastazensis, 46% in the unique type of fowleri, and 37.8 to 44.0% in two type specimens of treitlii at hand. These two specimens, from Steindachner's original series, plus the single known specimen of fowleri will be treated more fully in another paper.

Both treitlii and fowleri have similar color patterns and these patterns

are very different from that of *pastazensis*. The upper body scutes are dark brown to black in *treitlii* and *fowleri* and these two species lack a barred caudal fin.

Corydoras fowleri is quite different from pastazensis in several respects. For example, the least depth of the caudal peduncle is 14.4 to 15.1% of the standard length in pastazensis while it is 10% in fowleri. The bony orbit is 25.5 to 27.8% of the head length in pastazensis while it is 22.8% in fowleri. In fowleri the predorsal length is about 67% of the postdorsal length while in pastazensis this percentage varies from 78.1 to 80.0%. In body proportions both pastazensis and treitlii are very similar, almost all proportions being within the same range. However, the least caudal peduncle depth in specimens of treitlii is 57 to 62% of the snout length while in pastazensis it is 65.2 to 68.8%.

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